Amendments to the Claims are as follows:

Please substitute the original PCT claims with the following claims:

1. A method of determining a damping factor of a shock absorber, the method comprising:

attaching an accelerometer to one of a first and a second part of the shock absorber;

displacing the first and second parts of the sock absorber relative to one another at least once;

measuring an acceleration of the first and second parts of the shock absorber relative to each other by reading a signal from the accelerometer; and

determining the damping factor of the shock absorber by analysis of the measured acceleration.

2. The method as claimed in claim 1, further comprising:

attaching the accelerometer to a vehicle body proximate one of the wheels of the vehicle body and which is fast with one of the first part and the second part of the shock absorber.

3. The method as claimed in claim 1, wherein the signal from the accelerometer is read over a period of time at discrete intervals, to generate a series of measured acceleration values.

4. The method as claimed in claim 3, wherein determining the damping factor of the shock absorber comprises modeling movement properties of the shock absorber mathematically with a differential equation to generate a series of theoretical acceleration values and mathematically fitting the series of theoretical acceleration values to the series of measured acceleration values.

5. The method as claimed in claim 4, wherein the differential equation is of the second order.

6. The method as claimed in claim 4, wherein the mathematical fitting of the series of theoretical acceleration values to the series of measured acceleration values is performed iteratively.

7. The method as claimed in claim 6, wherein the iterative fitting of the series of theoretical acceleration values to the series of measured acceleration values is repeated until a predefined correlation between the series of theoretical and measured acceleration values is obtained.

8. The method as claimed in claim 7, wherein the mathematical fitting of the series of theoretical acceleration values to the series of measured acceleration values employs a Nelder Mead" algorithm.

9. The method as claimed in claim 8, wherein a damping constant from the fitted series of theoretical acceleration values is generated from the mathematical model to approximate the damping factor of the shock absorber with the damping constant generated from the mathematical model, and to compare the approximated damping factor of the shock absorber with qualitative data from a manufacturer of the shock absorber.

10. The method as claimed in claim 9, further comprising:
generating an alarm when the approximated damping factor falls outside tolerable limits of the qualitative data.

11. The method as claimed in claim 9, further comprising:
repeating the method a plurality of times;
storing the damping factors thereby obtained; and
calculating an average of the stored damping factors.

12. A shock absorber monitoring system, the system comprising:
an accelerometer to generate an acceleration signal, the accelerometer being removably attachable to one of a first part and a second part of a shock absorber;
a processor connected to the accelerometer, a processor being operable to read the acceleration signal from the accelerometer and to calculate a damping factor of the

shock absorber when the first and second parts of the shock absorber are displaced relative to one another; and

an indicator responsive to the process or, operable to display a value representative of the damping factor of the shock absorber.

13. The shock absorber monitoring system a claimed in claim 12, further comprising a storage device in which a set of instructions are stored, which instructions, when executed by the processor, direct the processor to perform a set of mathematical calculations.

14. The shock absorber monitoring system as claimed in claim 12, wherein the accelerometer is remote from the processor.

15. The shock absorber monitoring system claimed in claim 14, wherein the accelerometer includes radio frequency transmitter and the processor includes a radio frequency receiver responsive to the transmitter, operable to receive the acceleration signal via a radio frequency signal.

16. The shock absorber monitoring system as claimed in claim 12, further comprising a communication port connected to the processor, operable to send and receive data to and from a remote device, such as a personal computer.